

CHAPTER 2

Command and Control

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PRINCIPLES

Command and control is the system used by the MSB to direct, coordinate, and control the activities used to accomplish the logistics and medical mission. This encompasses the personnel, equipment, facilities, and procedures needed to gather and analyze data. It also involves planning what is to be done, issuing instructions for doing it, and supervising how it is done. The MSB commanders must organize their resources and institute control procedures to ensure that the support system provides the right support, in the right place, at the right time.

Today's dynamic battlefield demands adherence to the sustainment imperatives of integration, responsiveness, anticipation, continuity, and improvisation by all logistics commanders. Mission-oriented command and control promotes clear communication of the commander's intent; coordination of key elements of deep, close, and rear operations; and maximum latitude for subordinates in execution of assigned tasks.

Mission-oriented command and control involves more than just the issue of mission-type orders. It begins with a willingness on the part of the commander to delegate authority and provide resources commensurate with the responsibilities assigned to subordinates. Staff and subordinate commanders must be trained in communications and the decision-making process. They must know when and

in what circumstances they have the prerogative to act.

Command and control of MSB units requires as a minimum—

- A good understanding of the MSB commander's responsibilities.
- A thorough understanding of the division commander's intent for ongoing and future operations.
- Familiarity with the responsibilities and capabilities of higher, lower, and supporting unit levels.
- Close contact and exchange of information at all levels in the command chain.
- Writing directives, reports and orders. (However, maneuver warfare cannot depend solely on written communications.)
- Effective oral communications.
- Understanding the information systems related to CSS.
- Ensuring radio and data transmission nets are used effectively.
- Staying personally involved in and appraised of the CSS and tactical situations.
- Familiarity with the law of land warfare.

- An understanding of the responsibilities to the soldiers.

Information is an essential ingredient of command and control. The Army's command and control system operates to exchange information since it is the

means by which organizations are assigned missions and the status of their execution is determined. The C2 system consists of three interrelated components: organizational relationships, process, and facilities.

ORGANIZATIONAL RELATIONSHIPS

To accomplish the support mission, the MSB and its subordinate units are deployed throughout the DSA and division area. To perform its C2 functions, the MSB must develop and maintain a variety of relationships. They include relationships with—

- Higher organization—DISCOM.
- Supported organizations—Supported units in the division rear.
- Lateral organizations—FSBs, the AMCO, and corps logistics task force.
- Subordinate organizations—MSB company elements.

MSB AND DISCOM HEADQUARTERS

The MSB is under the command of the DISCOM commander. Requests for support to the MSB flow through the DISCOM staff and MMC. This ensures logistics and medical needs are staffed with the DISCOM S2/S3, DISCOM medical operations center and DMMC. The MSB commander provides technical support and advice to the DISCOM commander on matters concerning the division rear area. The DISCOM commander gives support priorities and direction on support operations, battlefield locations, security, and movement. He also makes decisions on cross-leveling assets among the MSB and FSB.

MSB AND DMMC

The DMMC provides supply and maintenance management for the MSB. It determines, procures, and directs the distribution of all supplies (except class VI, VIII, and X, and classified maps). It develops and supervises ASLs. It maintains division property book and Army equipment status reporting data. The DMMC also specifies the items and

quantities of class IX materiel to be physically located in the forward area and the MSB. It provides guidance for the disposition of items which includes instructions for evacuation of items that cannot be repaired by direct support maintenance units of the MSB.

Day-to-day supply (less class V, VII, VIII, and IX) management is provided by the general supply section of the DMMC to the S&S company of the MSB. This company provides information to the DMMC in its day-to-day supply transactions. The DMMC also provides day-to-day class IX direction to the maintenance companies of the MSB. The companies provide information to the DMMC on their day-to-day class IX transactions. The MMC property book and class VII section provide management of class VII supply for the MSB.

Day-to-day maintenance direction is provided by the materiel section of the DMMC to the support operations officer of the MSB. Since all those involved in the division rear maintenance effort need to be kept informed, maintenance information is passed among the DMMC and maintenance companies of the MSB.

MSB AND AMCO

The aircraft maintenance company is under the command of the DISCOM commander. The AMCO provides all division AVIM. It relies on the MSB for all ground equipment maintenance and repair parts, supply (except aviation), HSS, field services, and ground movement.

MSB AND FSBs

The relationship between the MSB and FSBs is established by the DISCOM commander. The quantity and type of support provided by the MSB to the FSBs are determined by command priorities and

capabilities of the FSBs to accomplish the mission. Based on command guidance from the DISCOM commander and the mission, the MSB provides tailored and timely reinforcing support to the FSBs. The MSB provides designated DS supply, reinforcing DS maintenance, transportation, some field service functions, and limited medical reinforcement to each FSB. The companies of the MSB maintain technical relationships with their related companies of FSBs located in the BSAs.

MSB AND MSB COMPANIES

The MSB commander must maintain close personal contact with his subordinate company commanders. He depends on them to provide timely information on the status of their companies. In addition, the company commanders must understand the MSB commander's intent to perform their roles with initiative. This understanding is enhanced through frequent face-to-face discussion.

Though the company commanders will likely be in the vicinity of the MSB CP to facilitate coordination, they must not tie themselves to one spot. They command their companies from the locations where

they can best assess and influence the support operation. These commanders use verbal orders, radio, visual signals, or wire among themselves, the MSB staff, their platoon leaders, and the supported elements.

MSB AND SUPPORTED DIVISION UNITS

The MSB provides direct support to division rear units. It thereby establishes a close working relationship with the logistics planners for division elements in the division rear. The division staff officer charged with assisting in the area of logistics is the G4. He provides logistics information to and coordinates support with the DISCOM support operations officer. The DISCOM support operations officer coordinates support requirements and capabilities with the MSB.

The MSB and the DISCOM support operations officers work out the day-to-day details of logistics operations for division elements in the division rear. These include specific requirements and time schedules. However, for routine operations, the MSB companies also develop relationships with supported unit CSS operators.

PROCESS

As with any other Army organization, the MSB commander and staff use the command and control process outlined in FM 101-5 to make decisions and supervise execution of orders. This process is a continuous one; the MSB commander and staff are always involved in estimating and planning. However, the focus becomes more precise when the MSB receives a mission. Typically, it has already received a warning order when the commander, XO, or support operations officer attends a DISCOM meeting. In some cases, the MSB commander must deduce the mission, but usually he receives the planning guidance and a restated mission from the DISCOM commander. In addition to working with the DISCOM commander, he also receives guidance from the DISCOM support operations branch.

When it receives or deduces its mission, the MSB begins mission analysis. The commander and staff take into account all the planning considerations such as the force to be supported, MSB capabilities, and the division commander's priorities of support. The command section identifies tasks required to accomplish the mission, restates the mission, and issues a warning order to all MSB elements, along with the commander's planning guidance.

The MSB commander provides his subordinate commanders and staff with planning guidance as often as required. The frequency, as well as the amount and content of the guidance, will vary with the mission, available time, tactical situation, available information, and historical data. Planning and guidance are used to prepare estimates. Therefore, the commander must ensure the nature of the guidance does not bias staff estimates. The purpose

of the estimate is to provide a common start point for staff planning. Planning guidance may include restated mission, specific courses of action to develop or eliminate from consideration assumptions, constraints, critical information required, or specific considerations (such as NBC, deception, or EW).

The MSB staff provides functional area estimates as discussed in FM 101-5 and Chapter 4 of this manual. On the basis of these estimates, the MSB commander finalizes his concept of operations. The XO then gives guidance on preparation of the OPORD/OPLAN. The S2/S3 consolidates the input and publishes and distributes the OPORD/OPLAN after the MSB commander approves it.

The MSB command section must keep in mind two points related to the decision-making process summarized above. First, planning is continuous. It does not begin on receipt of a mission. The commander and staff are always gathering data and anticipating future requirements. When the mission is received, however, steps must be taken to finalize all

the operational details of the CSS and security plans. In addition, the command section must adjust to time constraints. Frequently, time becomes the most critical factor affecting any commander in the decision-making process. The commander may have to proceed through this process and issue oral orders based on his knowledge of the situation without taking the time to formally include the staff in the process. The specificity and formalization of the planning guidance may have to be adjusted.

After the order is issued, the MSB commander and staff supervise its execution. The primary purpose of the staff is to assist subordinate units to carry out the intent of the MSB commander's order. Plans and orders are refined as the situation changes. Information comes back to the command section through reports and personal observations of the commanders and staff. On the basis of this information, they evaluate whether the mission is being accomplished. Changes are made to add to or revise previous instructions.

FACILITIES

Another component of command and control is facilities. This component includes command posts and supporting automation and communication systems. These facilities make possible processing and transmission of information and orders necessary for effective command and control. Automation and a general view of the MSB command post are discussed below. Communications are described in Chapter 3.

AUTOMATION

Automated systems throughout the DISCOM are designed to allow commanders to manage information to optimize use of limited resources.

Command, Control, and Subordinate System Structure

CCS2 is an evolving architecture that will improve logistics capabilities. The system will provide the means of interfacing the five battlefield control

functions of maneuver, air defense, CSS, intelligence/EW, and fire support. CCS2 will function as an integral part of, and in support of, the Army Tactical Command and Control System. (Note: Initial fielding will begin in FY90. A fully interactive, automated system is expected in 1995 when the objective CCS2 is realized.)

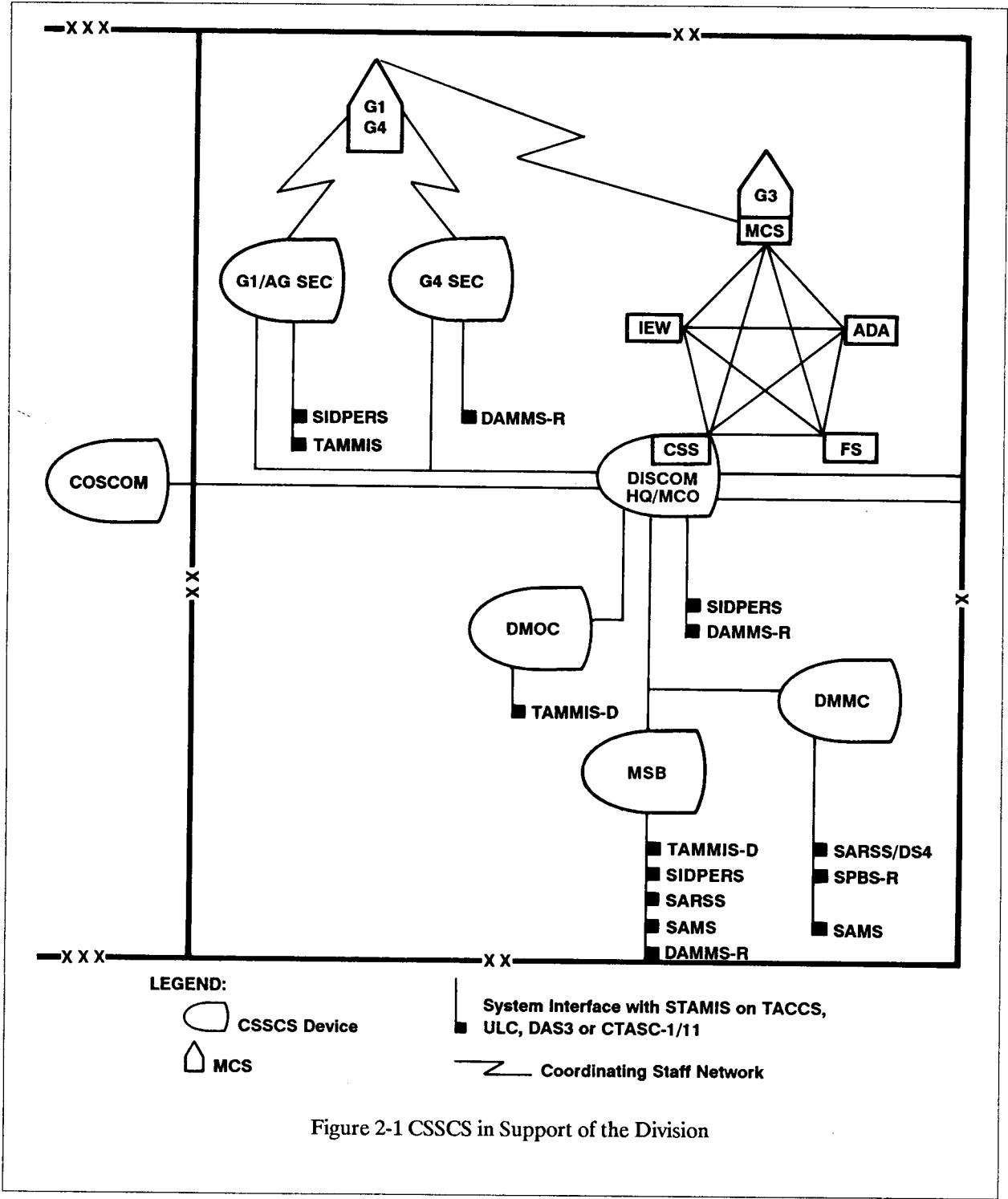
The CSS Control System of the ATCCS will be an automated system that will provide commanders and their staff with logistics, medical, and personnel information. It is designed to provide timely, accurate, integrated information that facilitates the decision-making process; accrues maximum benefit from resources; enhances visibility of critical assets; and identifies sustainment supportability. It facilitates the collection, analysis, projection, and distribution of information to the maneuver commanders. The CSSCS facilitates the consolidation of data from CSS subordinate units and the CSS Standard Army Management Information Systems. The CSSCS will

be employed at maneuver brigade, division, corps, and echelons above corps. Figure 2-1 shows the CSSCS in support of the division rear.

Functional Systems

Besides providing logistics C2 information to the CSSCS components of the ATCCS, CSS STAMISs are employed at the MSB to enhance logistics operations. These software systems operate on either the TACCS or the ULC hardware. The systems used by the MSB are discussed below

- *SIDPERS* operates on TACCS and automates strength accounting assignment, organization record keeping personnel record keeping, and labor-intensive military personnel operations within the S1 section of the MSB.
- *ULLS* operates on the ULC and provides automation of logistics functions at the unit and battalion levels. *ULLS* is employed throughout the division to include the DISCOM. The unit maintenance application has been developed. (In addition, an S4 consolidated logistics component is currently under development.) *ULLS* interfaces with CSSCS, SARSS-1, SAMS-1, SPBS-R, and other applicable STAMISs.
- *SARSS-1* operates on TACCS hardware in the MSB's S&S, light, and missile maintenance companies. The system automates class II, III (pkg), IV, VII, and IX supply actions. It performs time sensitive functions such as receipt, storage, issue, replenishment, inventory adjustments, supply performance reporting and excess identification, as well as maintaining accountable stock record balance. During normal distribution operations, *SARSS-1* interfaces directly with *SARSS-2A* on TACCS at the DMMC. In contingency operations, *SARSS-1* can operate in the autonomous mode without *SARSS-2A* support and interface directly with the DAAS to route requisitions directly to the wholesale supply system. In addition to interfacing with *SARSS-2A*, *SARSS-1* interfaces are maintained with *ULLS*, *SPBS-R*, *SAMS-1*, *DAMMS-R*, *CSSCS*, and *PWIS*.
- *SAMS-1* operates on TACCS and is employed in all maintenance companies assigned to the FSB and MSB (light, heavy, and missile maintenance companies) and in the aircraft maintenance company. The system automates maintenance production control, providing immediate job order and backlog status information. It provides, through file inquiry, repair parts and shop stock asset status. It screens production parts requirements against on-hand assets and automatically generates, edits and passes requests to the supply system via an interface with *SARSS-1*.
- *SAMS-2* operates on TACCS hardware and is employed in the light maintenance company of the MSB and in the DMMC materiel section. The system receives *SAMS-1* data and provides immediate production and supply requirements to managers. It gives daily visibility of deadlined equipment. The materiel condition status report module displays parts required for production and readiness by either unit or weapon system. In addition to the *SAMS-1* interface, *SAMS-2* interfaces with other appropriate *SAMS-2* (for example, DMMC to CMMC), *SAMS-3*, and other designated STAMISs.
- *DAMMS-R* operates on TACCS hardware and is employed in the HHD of the MSB where it interfaces with the MCO assigned to the S2/S3 section of the DISCOM headquarters. The MCO automated mission performance also requires a *DAMMS-R* on TACCS interface with the MSB TMT company *DAMMS-R* operations on ULC. The system provides intransit cargo movements data, mode asset status, hold/diversion status, movement information, transportation status reports, container reports, ETA forecasts, and transportation intelligence.
- *TAMMIS-D* operates on TACCS and ULC hardware and is employed in the medical company of the MSB. The system provides timely, accurate, and relevant information through the *MEDPAR-D* and *MEDLOG-D* subsystems. *MEDPAR-D* provides automated capabilities in treatment and disposition data, unit medical administration, ICRS, medical C2, and system setup/maintenance. There is also a *ADTMC*



module which will assist the aidman in the proper treatment and/or disposition of disease cases. MEDLOG-D manages medical supplies, medical assemblages, and biomedical equipment maintenance.

COMMAND POST

The dynamics of the modern battlefield— speed, complexity, and lethality—will require the very highest level of organization and operational efficiency within any CP structure. Automated and manual information systems must minimize the time required for administrative processing of information, ensure accurate portrayal of the tactical situation, prevent needless verification of data, and make information immediately available to the commander and members of the staff. Two principal staff sections provided to do this are the support operations office for the support mission and the S2/S3 section for tactical mission.

The primary MSB C2 facility is the command post. A key consideration in determining the location of the CP is the ability of the site to provide for good communications with higher, lower, and adjacent organizations. Considerations must include the capability to remote antennas and to use terrain to mask transmissions. FM 24-1 has details. The CP should be located near routes which allow relatively easy access into the area. Prominent terrain features and major road junctions should be avoided to prevent the enemy from readily determining the CP location.

When possible, the CP should be located in built-up areas. Barns, garages, and warehouses eliminate the need for extensive camouflage. Basements provide added protection from enemy fires. Use of built-up areas also reduces infrared and electromagnetic signatures and can reduce the requirement to move as often.

When built-up areas are not available, the CP should be located on the reverse slope to provide cover and concealment from both ground and air observation fires. The ground must be firm enough to support vehicle traffic, have good drainage, and provide enough space to disperse vehicles.

The CP should travel light and be able to move often. A CP is a major source of electromagnetic and infrared energy. If the CP does not move often, its location can be freed and targeted. The larger and more elaborate the CP setup, the less rapidly the CP will be able to move. However, the more frequently the CP moves, the more command, control, and communications suffer.

When the CP does move, it displaces by echelons. Once an interim operational capability is established at the new location, the remainder of the CP elements move.

LAYOUT

The CP is formed out of assets organic to the HHD MSB and is normally comprised of personnel and equipment from the plans and operations and communications branches and support operations section. The CP is organized into a dual shelter configuration. The direct support mission is managed in the support operations van while the communications, intelligence, and operations missions are accomplished in the S2/S3 tent as depicted in Figure 2-2.

CP PERSONNEL

The CP personnel normally operate in a 2-shift mode. Table 2-1 is an example of how the MSB CP positions could be organized into two shifts. This is only an example of minimum staffing. During intense activity, all available personnel may be required for short periods. However, maximum staffing cannot continue indefinitely. MSB commander and staff must consider fatigue and sleep loss that occur during combat. Fatigue caused by lack of sleep is a major source of battlefield stress. Leaders are particularly susceptible. Principles to minimize fatigue include the following:

- Specified sleep plans must be developed and enforced.
- Plans should allow for at least 3 to 4 hours of sleep every 24 hours. Even at this rate, performance, especially decision making skills, will become degraded in several days.

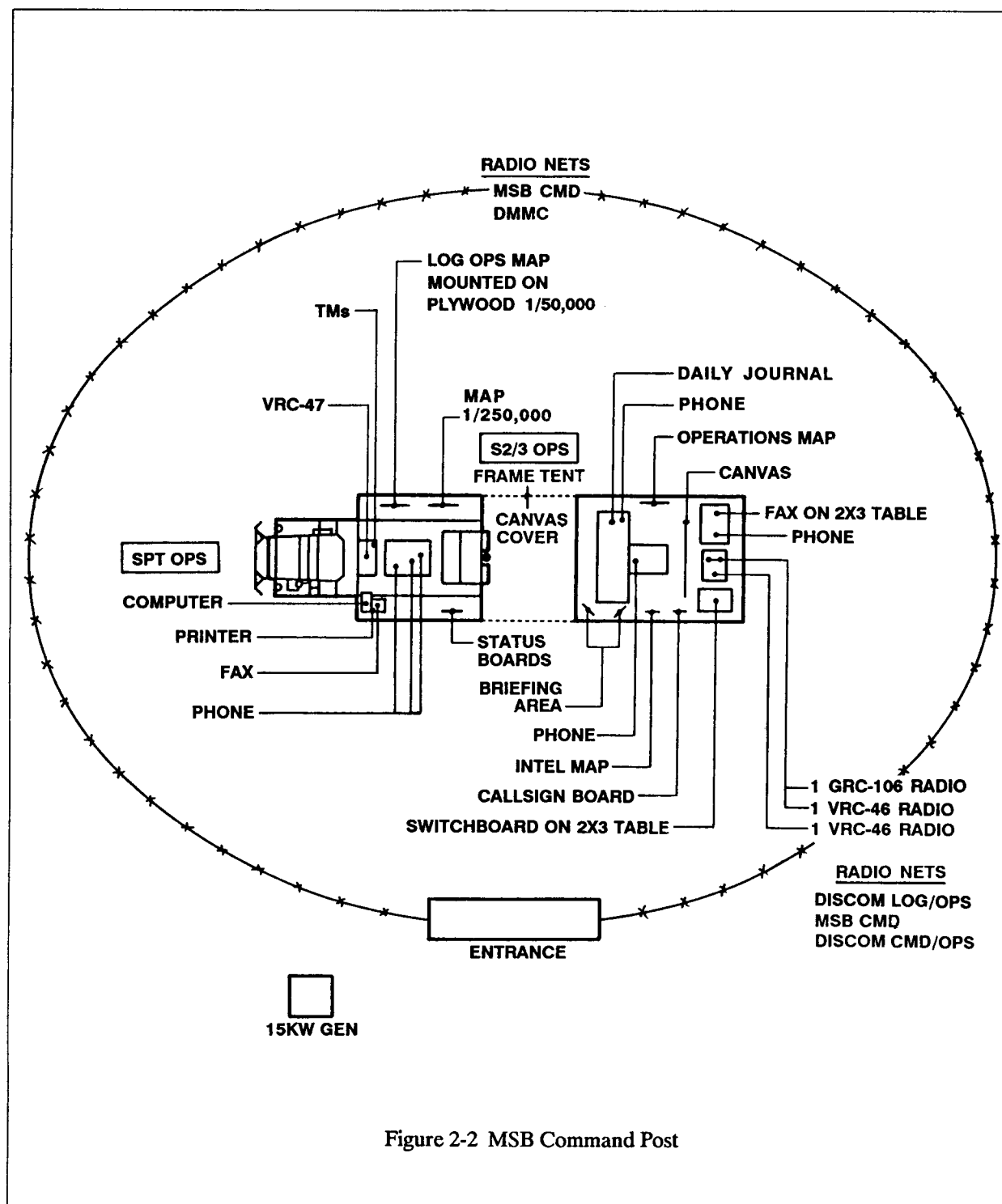


Figure 2-2 MSB Command Post

- Priority of sleep must go to those whose decision making is critical to the mission.

In order for sleep plans to work, soldiers must be cross-trained. One technique which may help is to develop performance supports to simplify critical tasks. These include aids such as specific SOPs or checklists.

The primary shift is normally assigned to the busiest part of the workday. The secondary shift is intended for periods of reduced activity. Normally a problem beyond the decision-making authority of the secondary shift will cause selective reinforcement from the primary shift.

Table 2-1. MSB CP Organized in Two Shifts

PEAK ACTIVITY	REDUCED ACTIVITY
S2/23 OFF	S2/S3 Ops Sgt
*Spt Ops Off	Maint Off
Sup-Svc Off	Unit Level Comm Maint
Maint Control Sgt	Clerk Typist
Trans Off	
*Mat Stor Supv	
*Maint Coordinator	
*Spt Ops Sgt	
Intel Analyst	
Equip Rec/Parts Sp	
NBC NCO	
*Laundry NCO	
Clerk Typist Spt Ops Typist	
Cbt Signaler	

***NOTE: May require frequent absences from the CP.**